

Claim Rejections under 35 U.S.C. § 103(a)

Claims 1-12 are rejected under 35 U.S.C. § 103(a) as being obvious over Berlowitz et al. (USPN 6,089,301) or Berlowitz et al. (USPN 6,165,949). Applicants respectfully disagree with the rejection; therefore, this rejection is respectfully traversed.

Berlowitz is directed to a premium synthetic lubricating oil base stock. The synthetic lubricating oil base stock of Berlowitz is made by a Fischer Tropsch process. Berlowitz teaches that the one or more additional base stocks may be mixed with, added to or blended with one or more of the Fischer-Tropsch derived base stocks. (Col. 5, lines 1-3). The additional base stocks include a hydrocarbonaceous base stock. (Col. 5, lines 3-5). Berlowitz further teaches that Fischer-Tropsch derived base stocks of the process of Berlowitz have superior properties to that of a blend with an additional base stock. In particular Berlowitz states that

“[b]ecause the base stocks of the invention and lubricating oils based on these base stocks are different, and most often superior to, lubricants formed from other base stocks, it will be obvious to the practitioner that a blend of another base stock with at least 20, preferably at least 40 and more preferably at least 60 wt % of the base stock of the invention, will *still* provide superior properties in many most cases, *although to a lesser degree* than only if the base stock of the invention is used.

(Col. 2, lines 36-44, emphasis added).

In contrast, the present invention is directed to a lube base oil comprising at least one synthetic lube base oil and at least one percent of a non-synthetic lube base oil wherein the lube base oil has a greater stability in the absence of additives than the stability of the synthetic lube base oil. Accordingly, the lube base oil blends of the present invention have *superior* properties to that of the synthetic lube base oil alone. The non-synthetic lube base oil is selected and blended with the synthetic lube base oil in such a way as to improve the stability of the synthetic lube base oil and to provide a blended lube base oil with superior stability. Therefore, the present invention lies in selecting the non-synthetic lube base oil and blending it with the synthetic, where the selecting and blending are done with a focus on improving the properties of the synthetic lube base oil.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP § 2143.

It is respectfully submitted that in no way does Berlowitz teach or suggest a lube base oil blended to comprise a synthetic lube base oil and a non-synthetic lube base oil such that the blended lube base oil has a greater stability than the stability of the synthetic lube base oil

alone. Berlowitz does not teach or suggest blending the Fischer Tropsch lube base stock with an additional base stock to improve the properties of the Fischer Tropsch lube base stock. It is further respectfully submitted that Berlowitz does not teach or suggest selecting a non-synthetic lube base oil to be blended with a synthetic and blending it with the synthetic, where the selecting and blending are done with a focus on improving the properties of the synthetic lube base oil. Therefore, it is respectfully submitted that Berlowitz does not teach or suggest all the claim limitations.

Claims 1-12 are also rejected under 35 U.S.C. § 103(a) as being obvious over Wittenbrink et al. (USPN 6,332,974). Applicants respectfully disagree with the rejection; therefore, this rejection is respectfully traversed.

Wittenbrink is directed to a wide-cut lubricant base stock made by hydroisomerizing and then catalytically dewaxing a waxy Fischer-Tropsch synthesized hydrocarbon fraction feed. Wittenbrink teaches that the Fischer-Tropsch derived base stocks may be blended with additional base stocks. (Col. 4, lines 33-49). The additional base stocks include a hydrocarbonaceous base stock. (Col. 4, line 43). Wittenbrink further teaches that Fischer-Tropsch derived base stocks of the process of Wittenbrink have superior properties to that of a blend with an additional base stock. In particular Wittenbrink states that

“[b]ecause the base stocks of the invention and lubricating oils based on these base stocks are different, and most often superior to, lubricants formed from other base stocks, it will be obvious to the practitioner that a blend of another base stock with at least 20, preferably at least 40 and more preferably at least 60 wt % of the base stock of the invention, will *still* provide superior properties in many most cases, *although to a lesser degree* than only if the base stock of the invention is used.

(Col. 4, lines 33-41, emphasis added).

In contrast, the present invention is directed to a lube base oil comprising at least one synthetic lube base oil and at least one percent of a non-synthetic lube base oil wherein the lube base oil has a greater stability in the absence of additives than the stability of the synthetic lube base oil. Accordingly, the lube base oil blends of the present invention have superior properties to that of the synthetic lube base oil alone. The non-synthetic lube base oil is selected and blended with the synthetic lube base oil in such a way as to improve the stability of the synthetic lube base oil and to provide a blended lube base oil with superior stability.

It is respectfully submitted that in no way does Wittenbrink teach or suggest a lube base oil blended to comprise a synthetic lube base oil and a non-synthetic lube base oil such that the blended lube base oil has a greater stability than the stability of the synthetic lube base oil alone. Wittenbrink does not teach or suggest blending the Fischer Tropsch lube base stock with an additional base stock to improve the properties of the Fischer Tropsch lube

base stock. It is further respectfully submitted that Wittenbrink does not teach or suggest selecting a non-synthetic lube base oil to be blended with a synthetic and blending it with the synthetic, where the selecting and blending are done with a focus on improving the properties of the synthetic lube base oil. Therefore, it is respectfully submitted that Wittenbrink does not teach or suggest all the claim limitations.

Accordingly, withdrawal of the obviousness rejections is respectfully requested.

Conclusion

For the reasons noted above, the art of record does not disclose or suggest the inventive concept of the present invention as defined by the claims. In view of the foregoing remarks, reconsideration of the claims and allowance of the subject application is earnestly solicited. The Examiner is invited to contact the undersigned at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted,

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